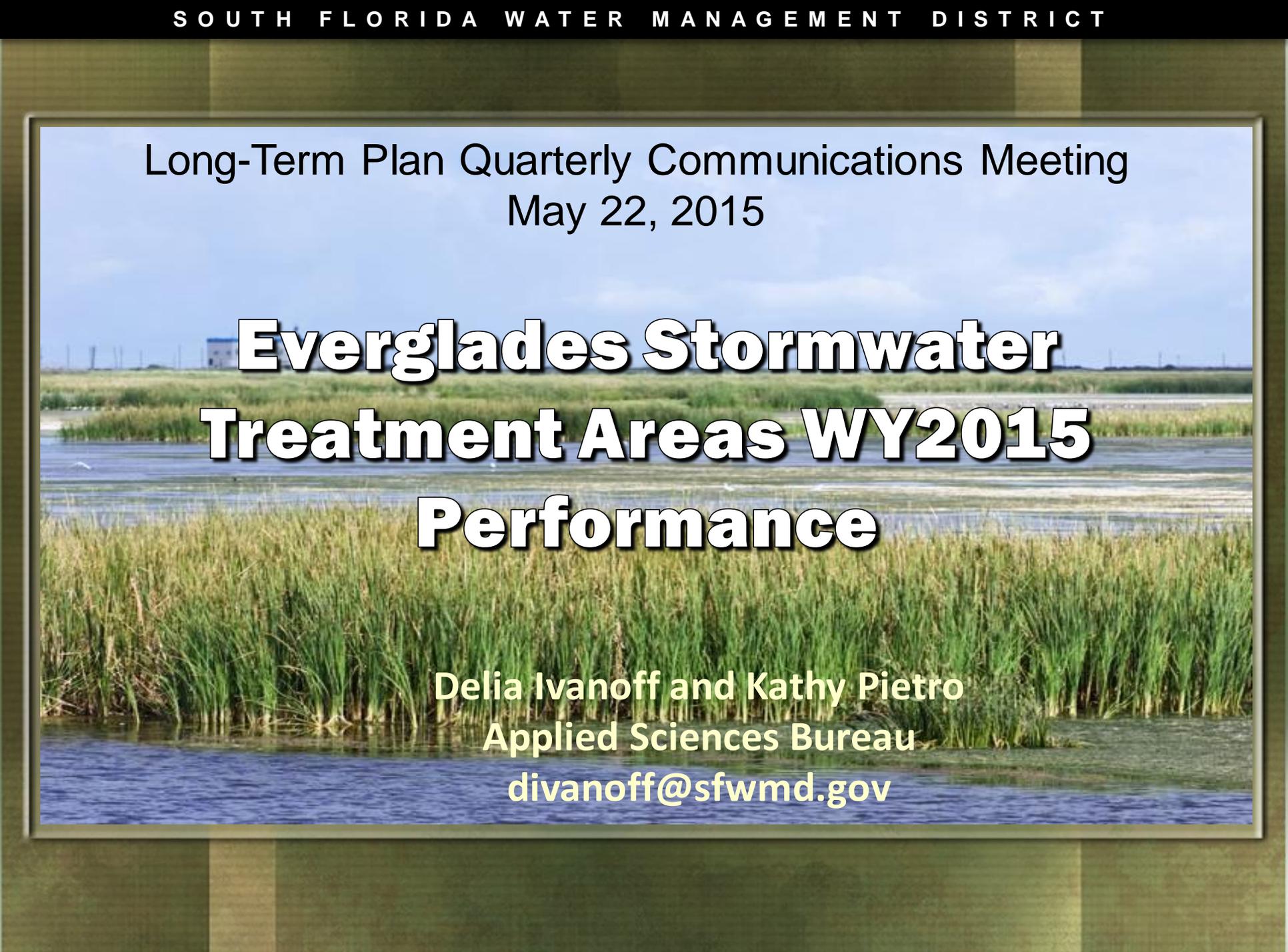


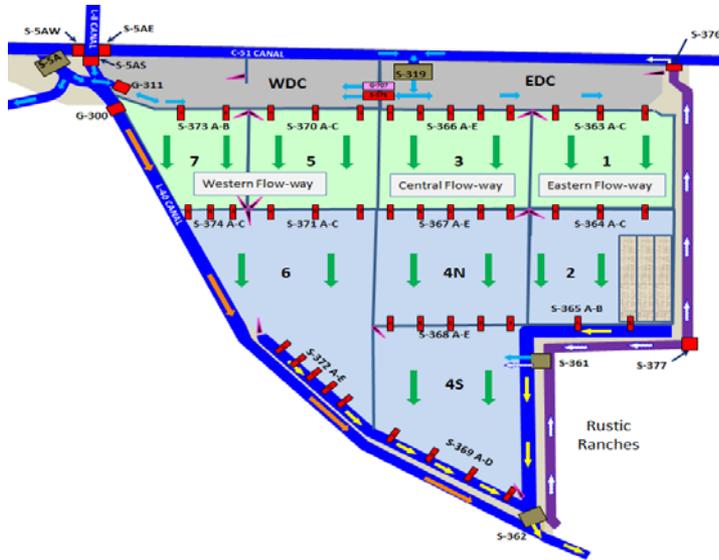
Long-Term Plan Quarterly Communications Meeting  
May 22, 2015



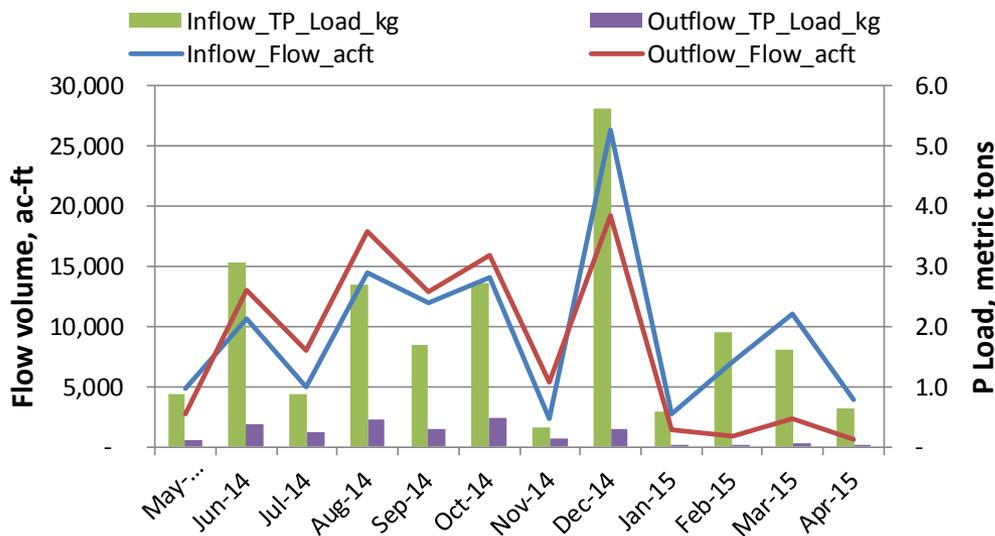
**Everglades Stormwater  
Treatment Areas WY2015  
Performance**

Delia Ivanoff and Kathy Pietro  
Applied Sciences Bureau  
[divanoff@sfwmd.gov](mailto:divanoff@sfwmd.gov)

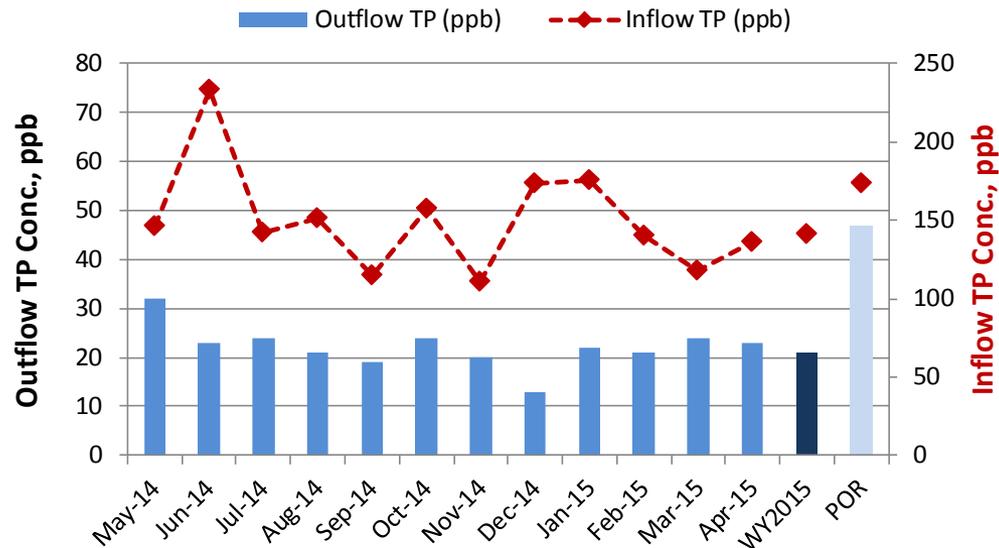
# STA-1E WY2015 Operational Highlights



- Total inflows: 111,287 ac-ft
  - From Lake: 53,400 ac-ft
- Total inflow TP load: 19 mt
- Operational restrictions due to protected and/or endangered species nesting
- Eastern flow-way off line for PSTA removal then grow-in
- S364B, S366C, S367D and S368C offline for repairs
- Vegetation activities including aerial spraying and planting

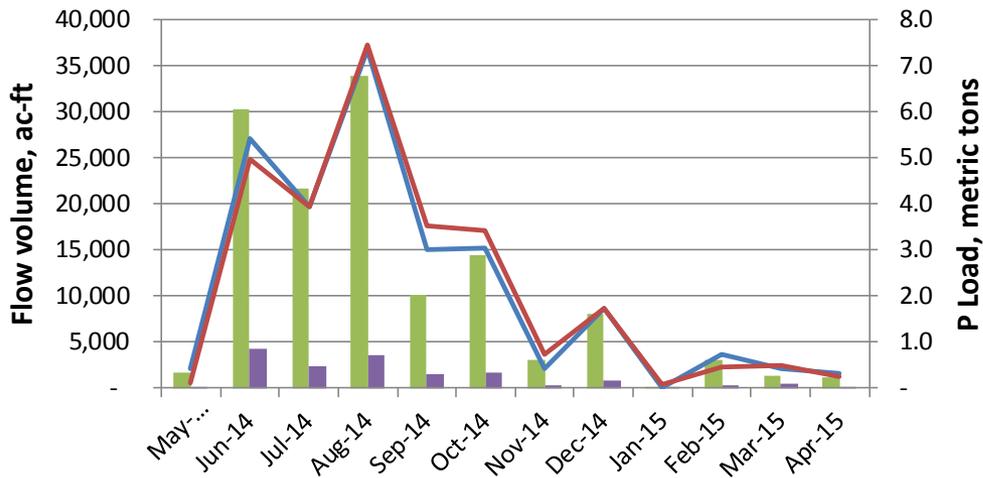
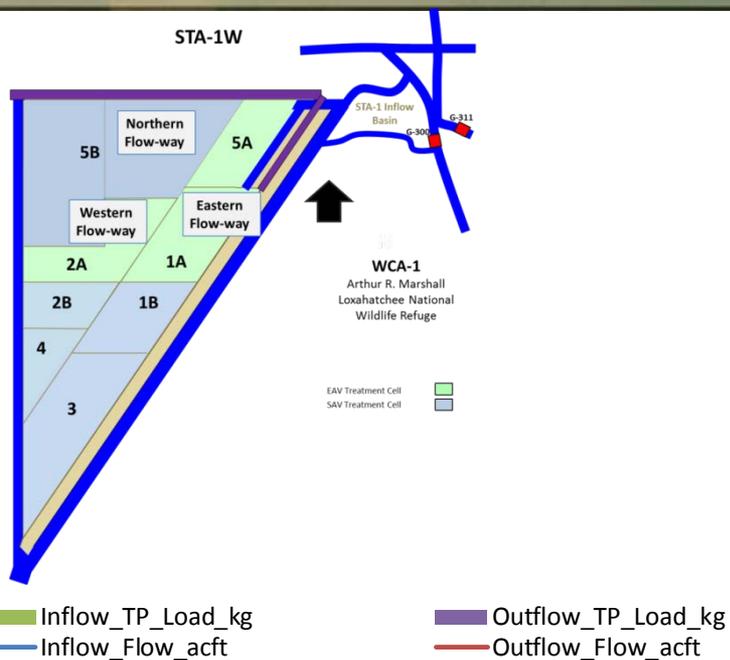


# STA-1E WY2015 Performance



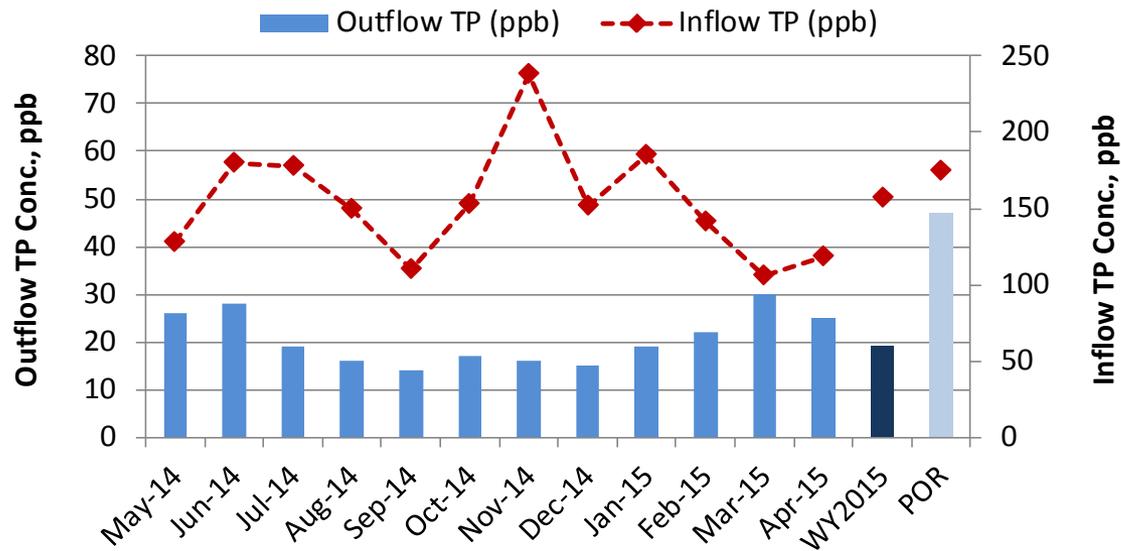
- Monthly inflow TP concentrations: 111-233 ppb
- Monthly outflow TP concentrations: 13-32 ppb
- Annual inflow TP FWMC: 141 ppb
- Annual outflow TP FWMC: **21 ppb**
  - Less than half of POR value (47 ppb)

# STA-1W WY2015 Operational Highlights



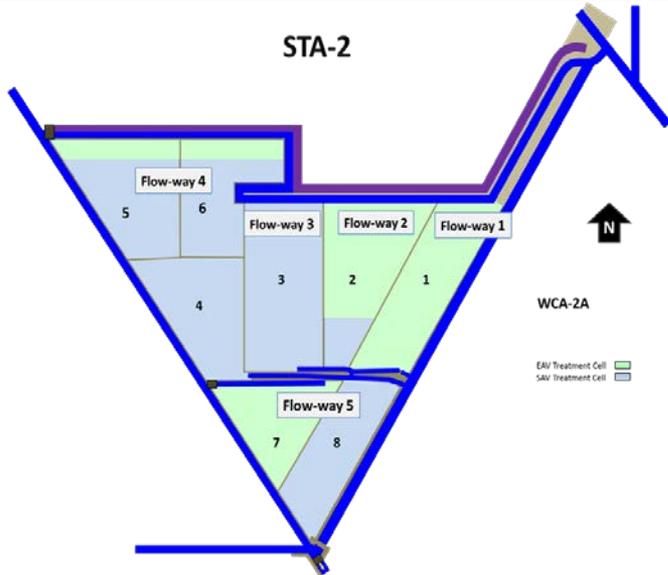
- Total inflows: 140,139 ac-ft
  - From Lake: 50,800 ac-ft
- Total inflow TP load: 27 mt
- Operational restrictions due protected species nesting
- Eastern & Western flow-ways offline beginning March 2015 for vegetation rehabilitation

# STA-1W WY 2015 Performance

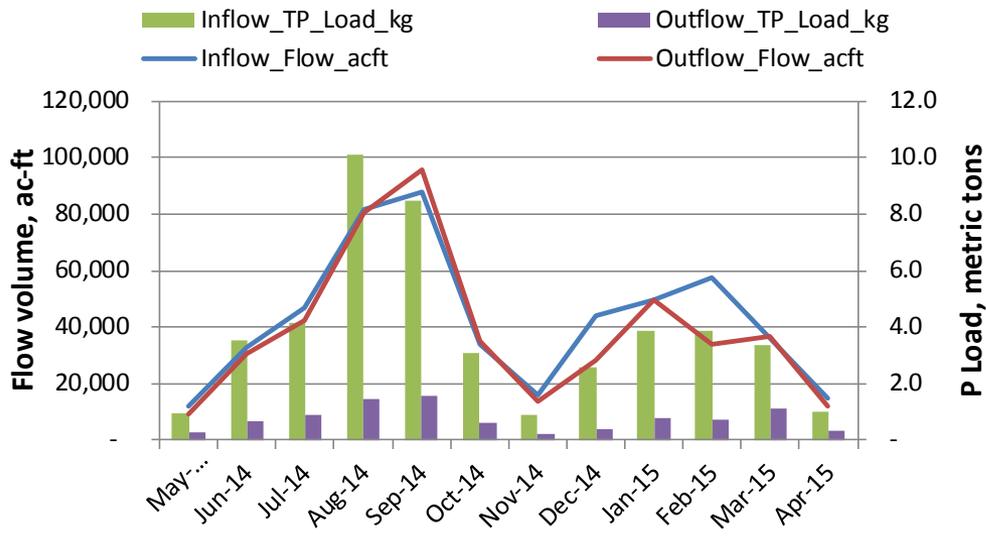


- Monthly inflow TP concentrations: 106-238 ppb
- Outflow TP concentrations: decreasing trend first half of WY and slight increase after Oct. 2014
- Annual inflow TP FWMC: 157 ppb
- Annual outflow TP FWMC: 19 ppb
  - Less than half of POR value (47 ppb)

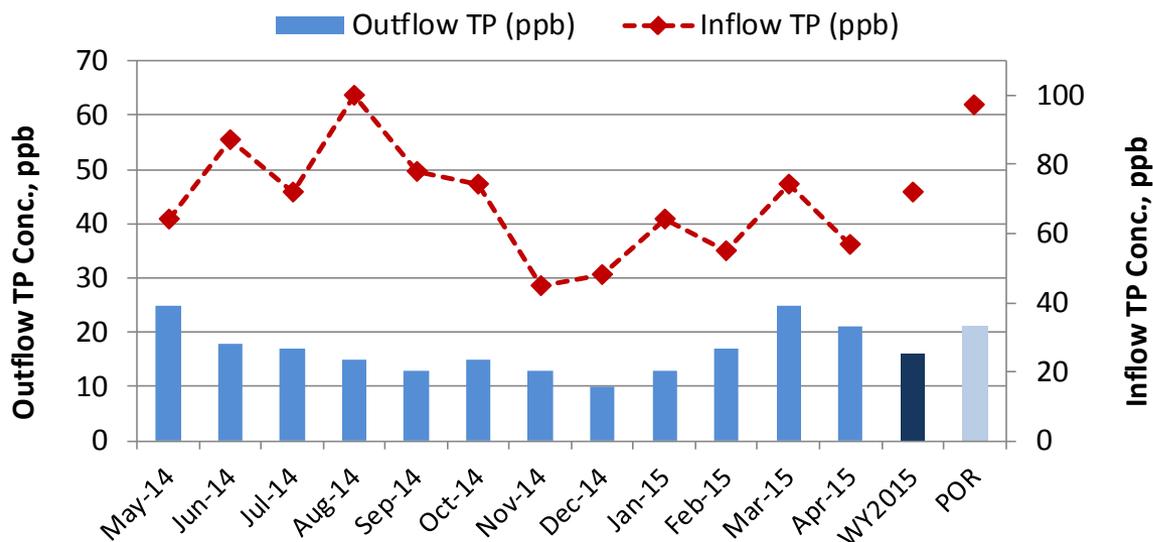
# STA-2 Operational Highlights



- Total inflows: 528,841 ac-ft
  - From Lake: 254,500 ac-ft
- Total inflow TP load: 47 mt
- Operational restrictions due to protected species nesting
- Chara loss in SAV cells
- SAV inoculation in Cells 2, 5, and 6
- Flow-way 5 offline to grade Cell 8 high areas and vegetation grow-in

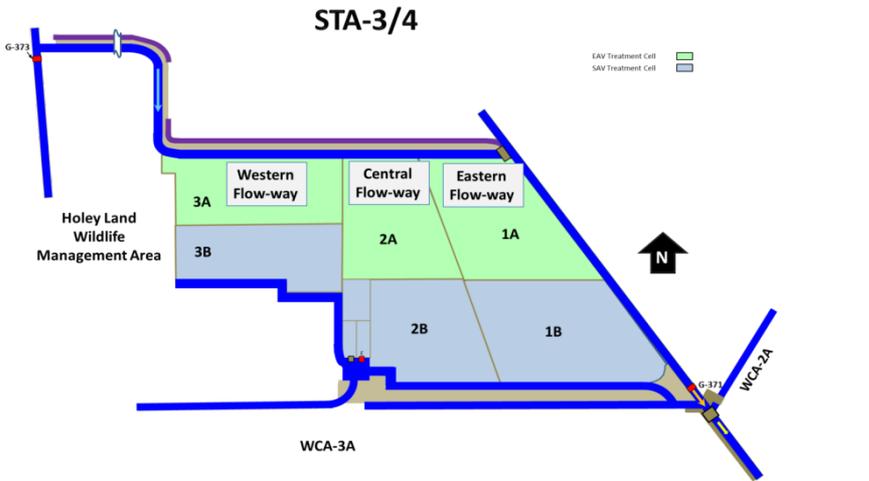


# STA-2 WY 2015 Performance

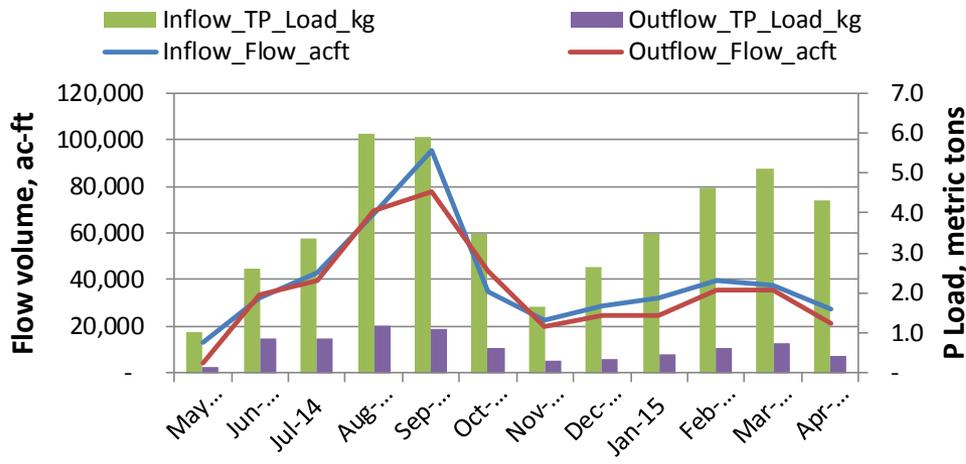


- Monthly inflow TP concentrations: decreased during Lake water deliveries
- Outflow TP concentrations: decreasing trend first half of WY and slight increase after Jan. 2015
- Annual inflow TP FWMC: 72 ppb
- Annual outflow TP FWMC: 16 ppb
  - Less than POR value (21)

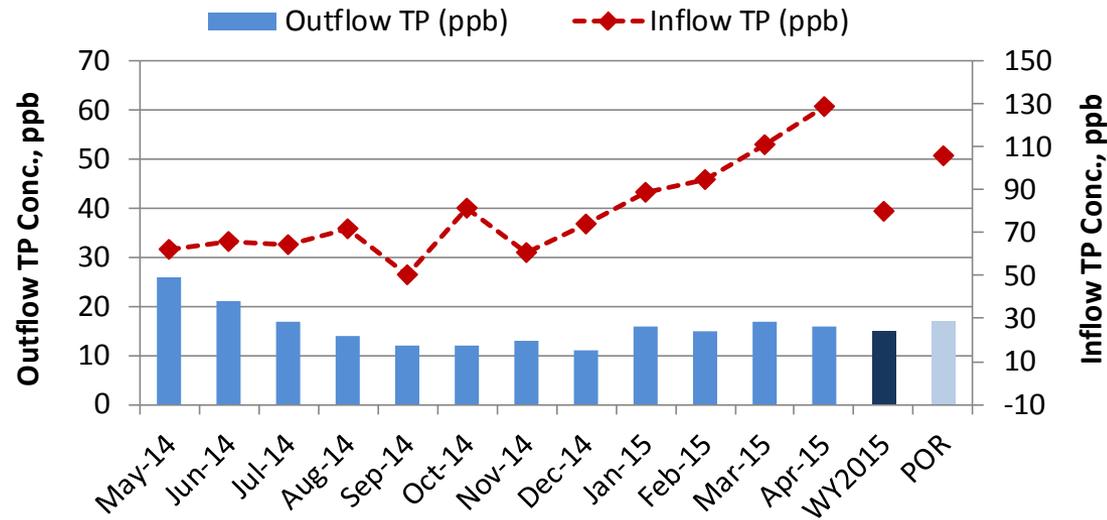
# STA-3/4 Operational Highlights



- Total inflows: 500,116 ac-ft
  - From Lake: 226,900 ac-ft
- Total inflow TP load: 49 mt
- G373 diversion for water delivery to WCA-2A and WCA-3A from 5/28 to 6/9/14
- Restrictions due to protected species nesting
- Chara loss in SAV cells
- SAV inoculation and bulrush planting in Cell 2B
- Dry Season Flow Test (using Lake water) in the Western Flow-way started 11/20/2014

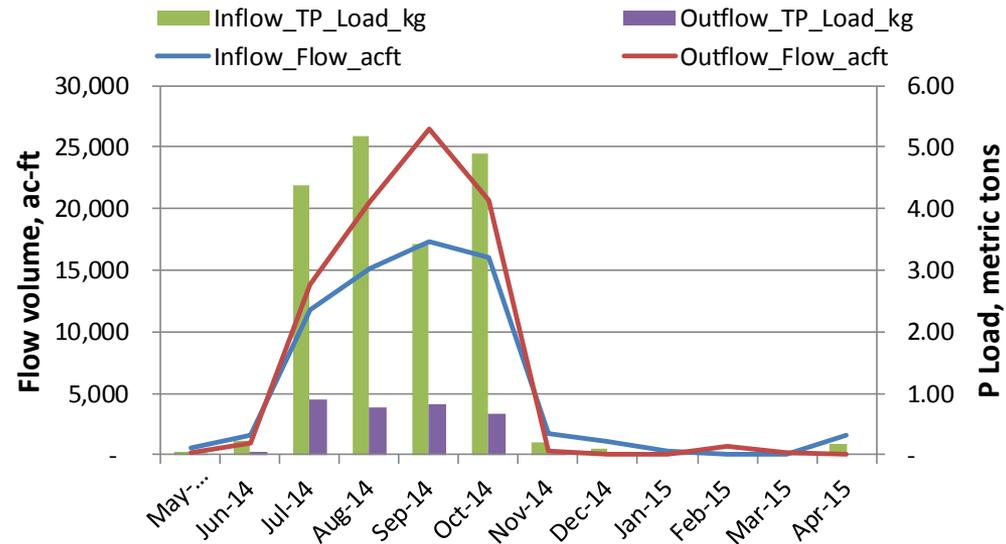
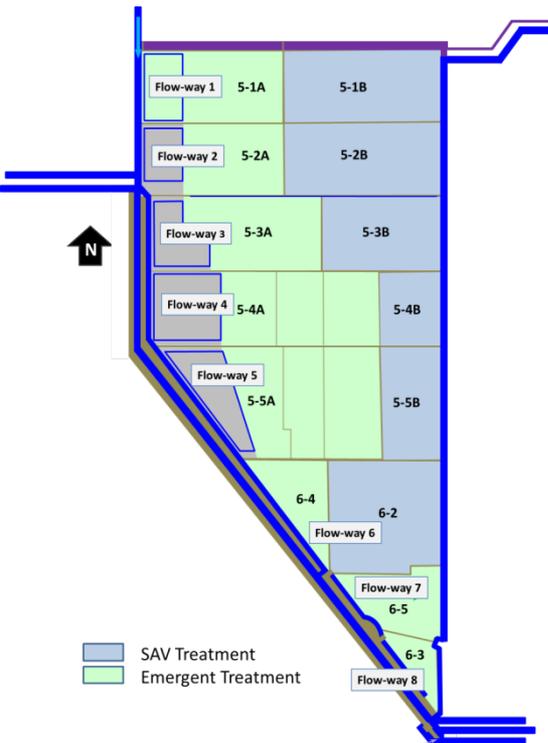


# STA-3/4 WY 2015 Performance



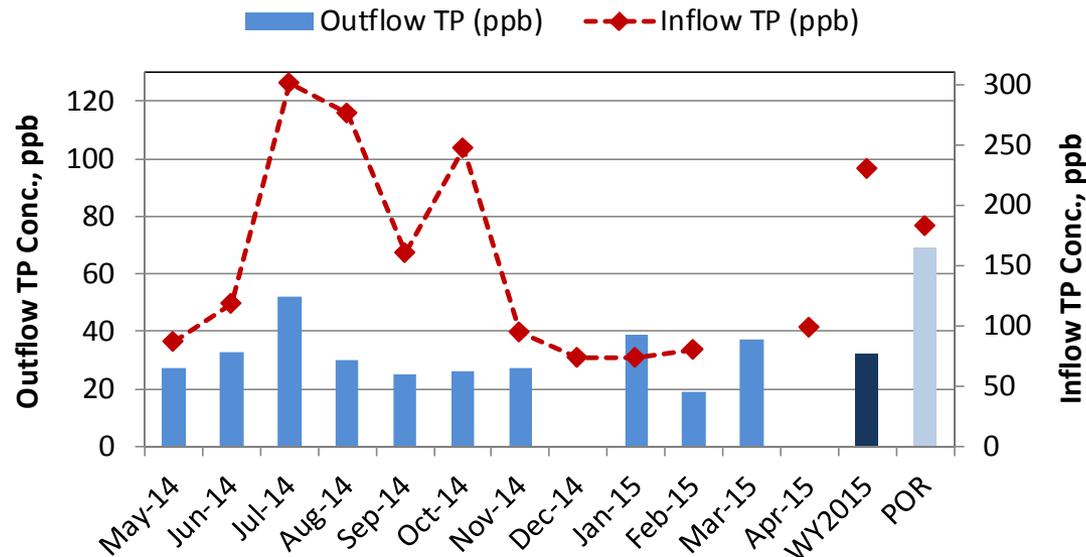
- Monthly inflow TP concentrations: ~80 ppb or less early in WY but increasing trend after Jan. 2015
- Outflow TP concentrations: decreasing trend first half of WY but slight increase after Jan. 2015
- Annual inflow TP FWMC: 80 ppb
- Annual outflow TP FWMC: 15 ppb
  - Slightly less than POR value (17 ppb)

# STA-5/6 Operational Highlights



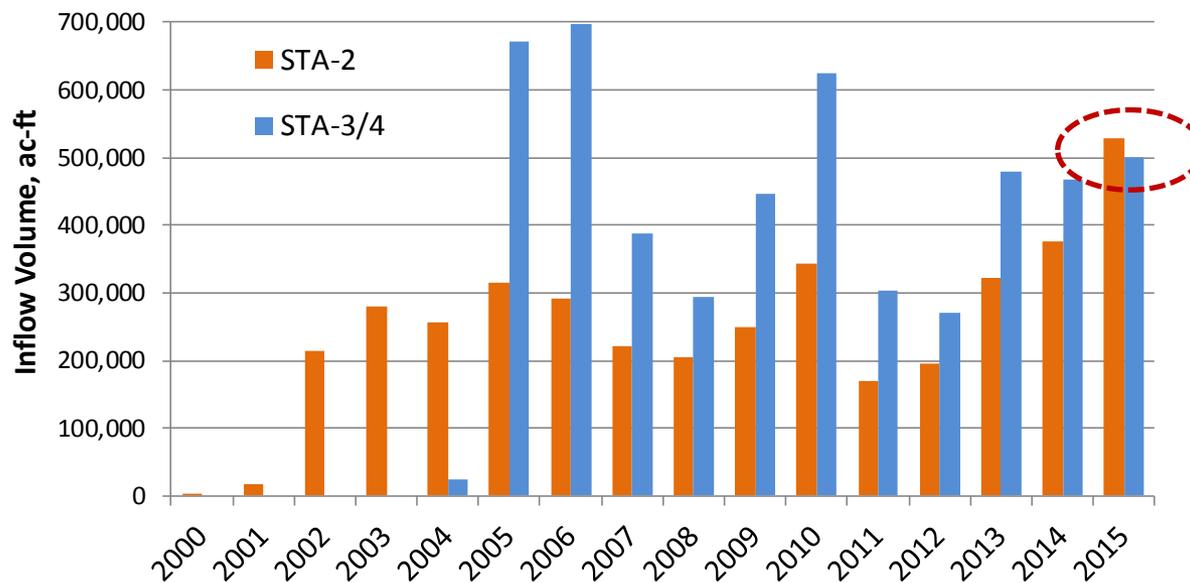
- Total inflows: 83,122 ac-ft
  - Mostly wet season flows
- Total inflow TP load: 24 mt
- Restrictions due to protected and endangered species nesting
- Dryout occurred in some cells during dry season

# STA-5/6 WY 2015 Performance



- Monthly inflow TP concentrations: highest during rainy season
- Monthly outflow TP concentrations: 19-50 ppb
- Annual inflow TP FWMC: 230 ppb
- Annual outflow TP FWMC: 32 ppb
  - Less than half of POR value

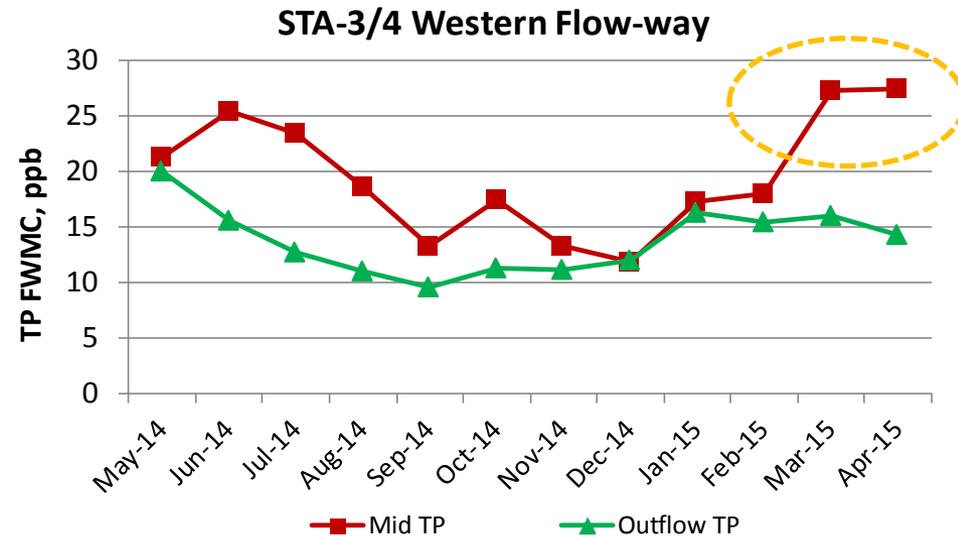
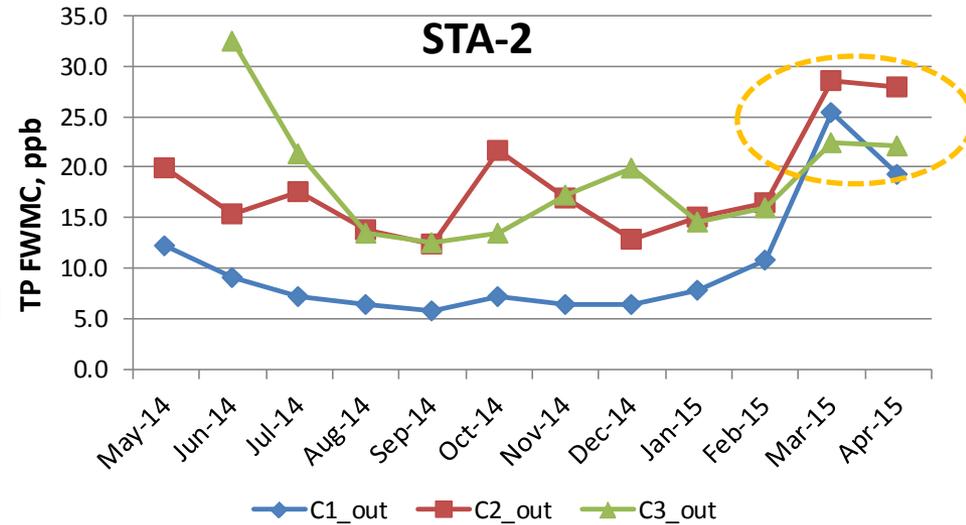
# Period of Record Inflows for STA-2 and STA-3/4



- WY 2015 inflows highest on record for STA-2 but not for STA-3/4

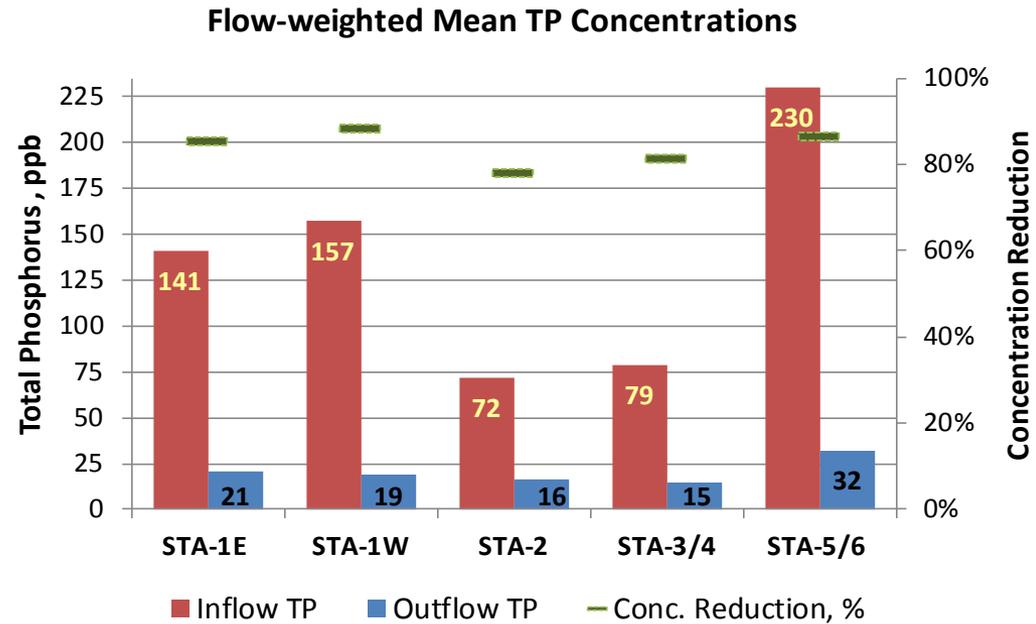
# Flow-way Outflow TP Concentrations

- General trend of higher TP concentrations during dry season which decline during wet season
- High TP concentrations at STA-3/4 Western Flow-way mid-levee in March & April 2015



# Summary

- Total inflow volume:
  - ~1,358,000 acre-feet
    - ~43% from Lake Okeechobee Regulatory Releases
    - Unprecedented Lake releases to STA-2 & STA-3/4
- Phosphorus load:
  - Inflow: 167 metric tons
  - Outflow: 28 metric tons (**83% reduction**)



- Annual inflow and outflow TP concentrations highest at STA-5 and lowest at STA-2 and STA-3/4
- Concentration reductions of **78-88%**

# Questions?

